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March 1, 2019

***VIA ELECTRONIC FILING***

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
The Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia SC 29210

**Re: Duke Energy Progress, LLC – 2018 Meter Testing Results  
Docket No. 1989-499-E**

Dear Mrs. Boyd:

Enclosed for filing please find Duke Energy Progress LLC's 2018 Final Sample and Periodic Histograms and All Group Summary Program Table as approved in Docket 1989-499-E, Order No. 90-131. The results represent combined North Carolina and South Carolina figures. In addition, a copy of the results is being submitted to the South Carolina Office of Regulatory Staff pursuant to 10 S.C. Code Ann. Reg 103-370(1).

Please do not hesitate to contact me if you have any questions or require any further information.

Sincerely,

Heather Shirley Smith

Enclosure

cc: Sarah Johnson, Office of Regulatory Staff (via email w/enc.)  
Andrew Bateman, Office of Regulatory Staff (via email w/enc.)  
Marcus Preston (via email w/enc.)

**Duke Energy Progress**  
**2018 Watthour Meter Periodics**  
**Watthour Meter Groupings**

Meters in periodic groups were not tested in 2018 as they were all tested within the 16 year interval required.

**Duke Energy Progress**  
**2018 Watthour Meter Samples**  
**Watthour Meter Groupings**

<b>Group</b>	<b>Mfg.</b>	<b>Type(s)</b>	<b>Description</b>	<b>Test Plan</b>	<b>Sample Size</b>	<b>Population</b>	<b>Sample Conclusion</b>
11	Elster	A1+	Single Phase, self-contained, demand and TOU	Double Sample Phase-I	166	1,363	Pass
12	Elster	A3	Single Phase, self-contained, demand and TOU	Double Sample Phase-I	166	5,576	Pass
16	Landis & Gyr	Focus AL	Single Phase, self-contained, with ERT Module	Double Sample Phase-I	167	3,124	Pass
20	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	165	3,580	Pass
21	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	167	298,672	Pass
23	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	177	234,983	Pass
24	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	166	225,591	Pass
25	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	172	351,551	Pass
27	Itron	Centron	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	168	250,704	Pass
30	General Electric	EV, I70,KV, KV2	Single Phase, self-contained, demand and TOU	Double Sample Phase-I	313	514	Pass
35	ABB/Elster	A1	Single Phase self-contained, demand and TOU	Double Sample Phase-I	181	1,258	Pass
36	General Electric	I210	Single-phase, self-contained, with ERT Module	Double Sample Phase-I	169	9,882	Pass

43	Landis & Gyr	Focus AXR	Three-phase self-contained, demand and TOU	Double Sample Phase-I	167	4,643	Pass
44	Landis & Gyr	Focus AXR	Single-phase self-contained, demand and TOU	Double Sample Phase-I	174	23,948	Pass
46	Itron	Centron, Sentinel	Three-phase and network, self-contained with ERT Module	Double Sample Phase-I	171	44,231	Pass
47	Itron	Centron, Sentinel	Three-phase and network, self-contained with ERT Module	Double Sample Phase-I	169	10,749	Pass
51	Elster	A3	Three-phase and network, self-contained, demand and TOU	Double Sample Phase I	169	1,046	Pass
65	Elster	A3	Single-phase, self-contained, demand and TOU	Double Sample Phase I	180	2,500	Pass



## Duke Energy Progress Meter Classification Key

A break-down of the code used for the DEP meter classifications \*\* \*\* \* (12 34 56).

For example: SS \*1 NI, would be a Solid-State meter either self contained or T-rated Non-initiating

### For positions 12

ND = Non-Demand  
 TD = Thermal Demand  
 MD = Mechanical Demand  
 ED = Electronic Demand (hybrid)  
 TO = Time-of-use  
 TR = Transducer  
 SS = Solid-State meter  
 RE = Recorder  
 VV = Volt-Squared Hour  
 SD = Solid-State Demand  
 ST = Solid-State TOU  
 SP = Solid-State Prepay

### For positions 34

S = Self contained  
 T = Transformer Rated  
 1 = Single Phase  
 3 = Three Phase

### For Positions 56

NI = Non-Initiating  
 WI=With-Initiating

# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-011 Summary

### Group Information

Manufacturer: ELSTER/ABB/WESTINGHOUSE

Watthour Meter Type(s): A1+

PE Type Code(s): H38,H39,H40

Meter Classification: S\*S1NI

Methodology: Double Sampling Ph 1

Population: 1363

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.886

Standard Deviation: 0.0596

Number of Test > 102%: 0

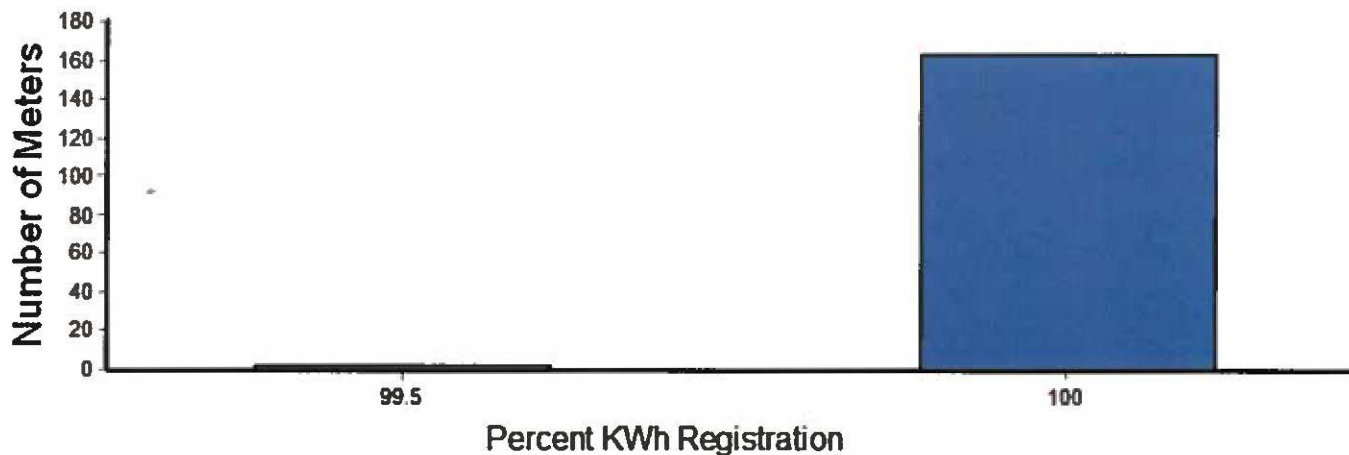
Number of Test 98 - 102%: 166

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-011 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-012 Summary

### Group Information

Manufacturer: ELSTER/ABB/WESTINGHOUSE

Watthour Meter Type(s): A3

PE Type Code(s): H43,H44,H52,H53,H62

Meter Classification: S\*S1NI

Methodology: Double Sampling Ph 1

Population: 5476

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.928

Standard Deviation: 0.0734

Number of Test > 102%: 0

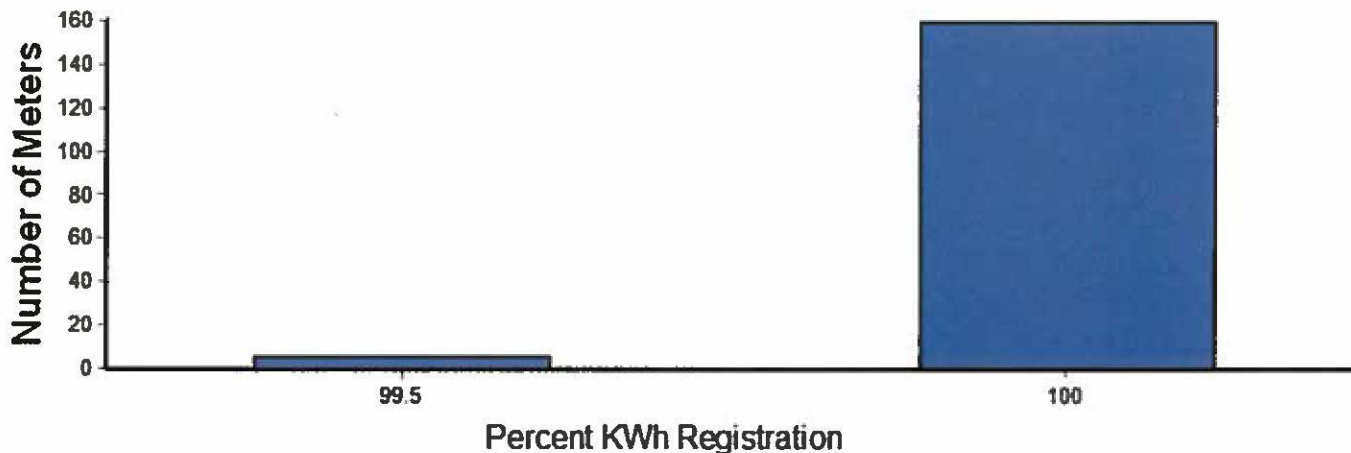
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-012 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-016 Summary

### Group Information

Manufacturer: LANDIS & GYR/DUNCAN

Watthour Meter Type(s): FOCUS AL

PE Type Code(s): D21

Meter Classification: SSS1NI

Methodology: Double Sampling Ph 1

Population: 3124

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.966

Standard Deviation: 0.0462

Number of Test > 102%: 0

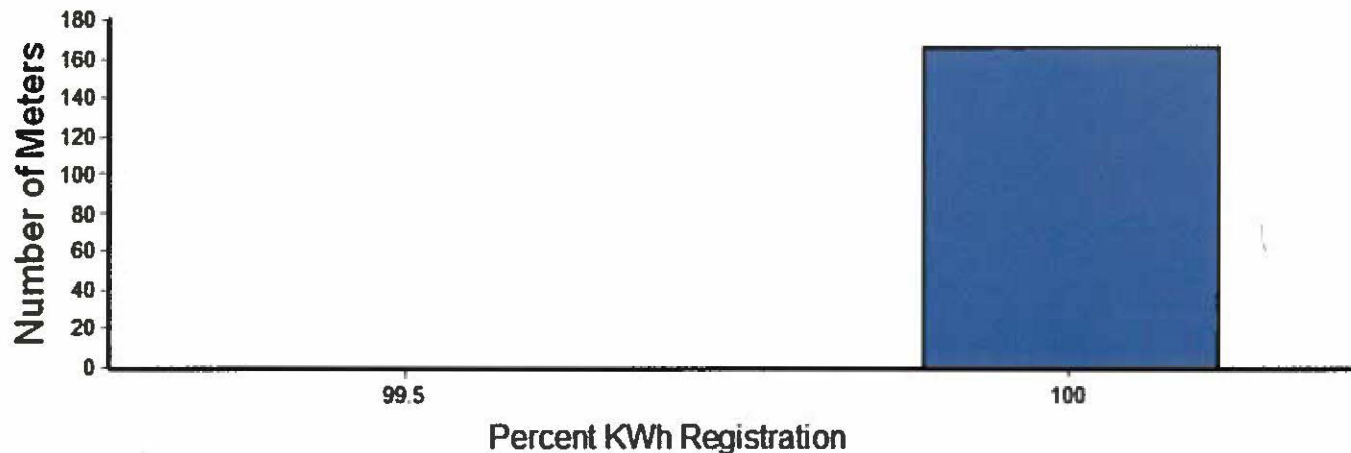
Number of Test 98 - 102%: 167

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-016 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-020 Summary

### Group Information

Manufacturer: ITRON

Watthour Meter Type(s): CENTRON

PE Type Code(s): S24

Meter Classification: SSS1NI

Methodology: Double Sampling Ph 1

Population: 3580

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.836

Standard Deviation: 0.1409

Number of Test > 102%: 0

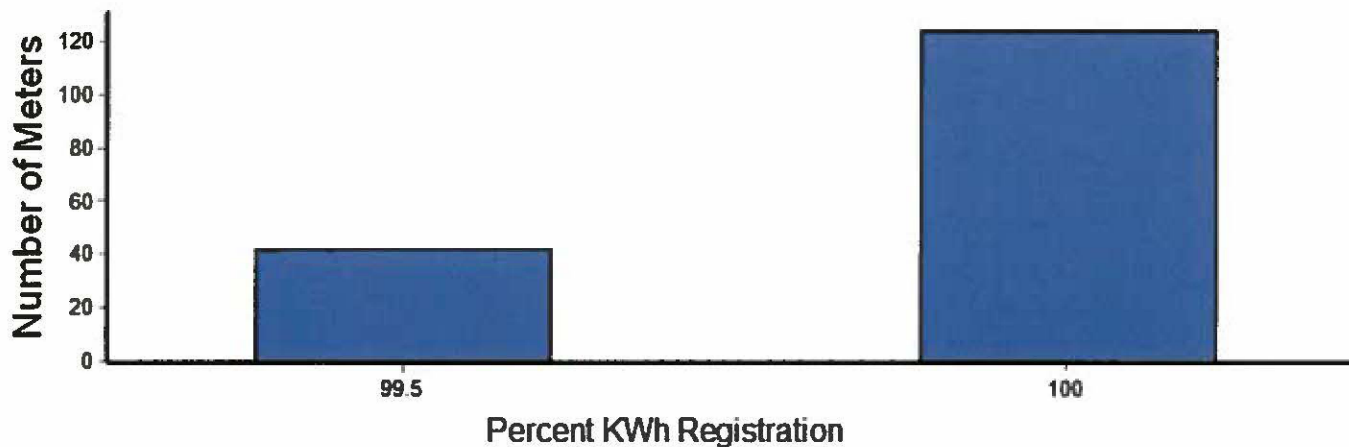
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-020 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Wathour Meter Group S-021 Summary

### Group Information

Manufacturer: ITRON

Wathour Meter Type(s): C1SR

PE Type Code(s): S25

Meter Classification: SSS1NI MMR

Methodology: Double Sampling Ph 1

Population: 298672

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.961

Standard Deviation: 0.1171

Number of Test > 102%: 0

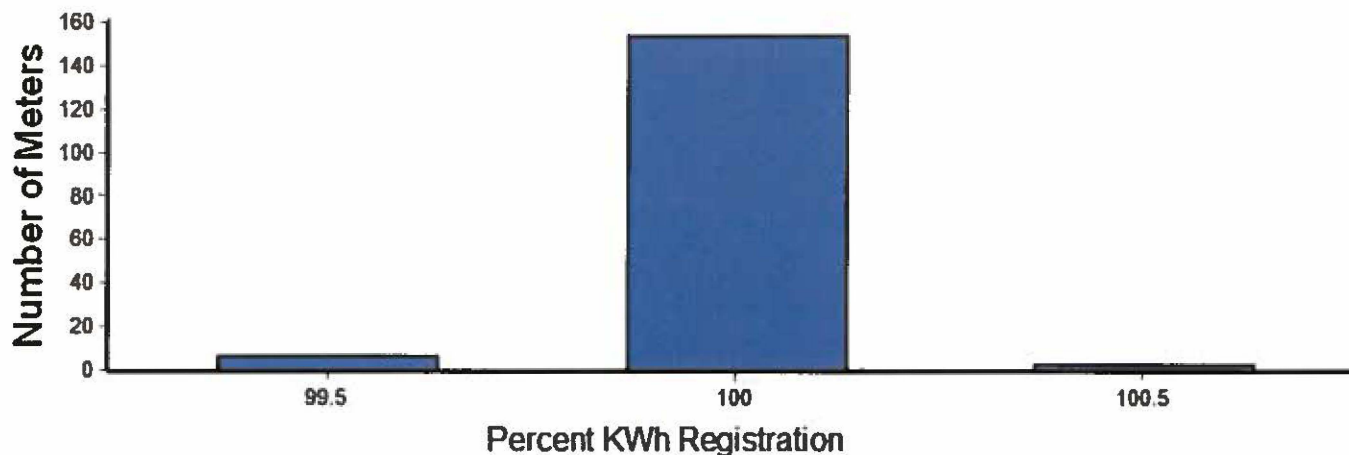
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast wathour meters is less than 2

## Histogram of Group S-021 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Wathour Meter Group S-023 Summary

### Group Information

Manufacturer: ITRON

Wathour Meter Type(s): C1SR

PE Type Code(s): S27

Meter Classification: SSS1NI MMR

Methodology: Double Sampling Ph 1

Population: 234983

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.923

Standard Deviation: 0.1093

Number of Test > 102%: 0

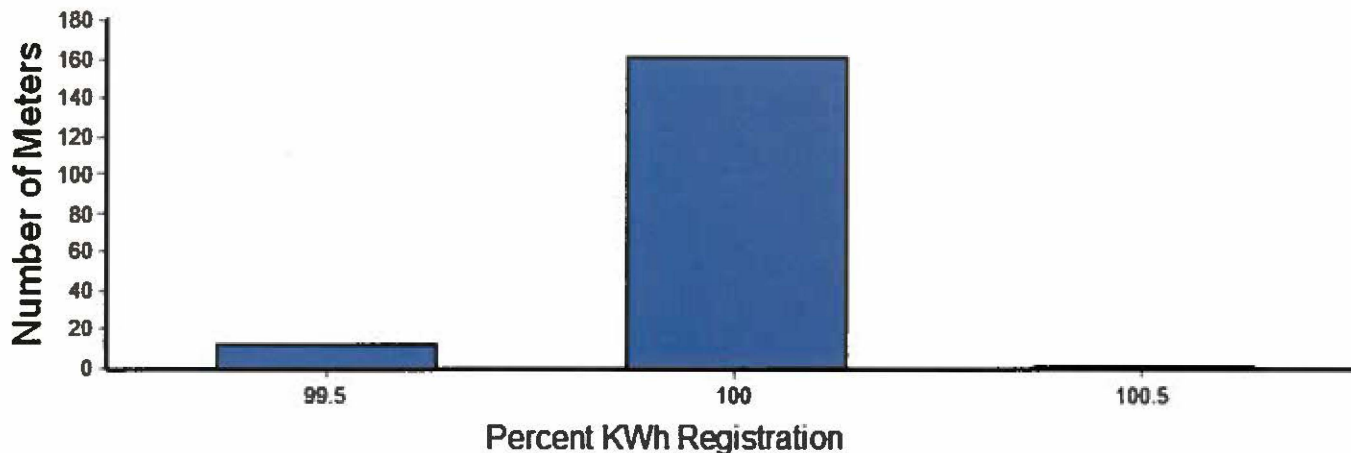
Number of Test 98 - 102%: 176

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast wathour meters is less than 2

## Histogram of Group S-023 Meter Accuracies





# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Wathour Meter Group S-024 Summary

### Group Information

Manufacturer: ITRON

Wathour Meter Type(s): C1SR

PE Type Code(s): S26,S28

Meter Classification: SSS1NI MMR

Methodology: Double Sampling Ph 1

Population: 255951

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.952

Standard Deviation: 0.1304

Number of Test > 102%: 0

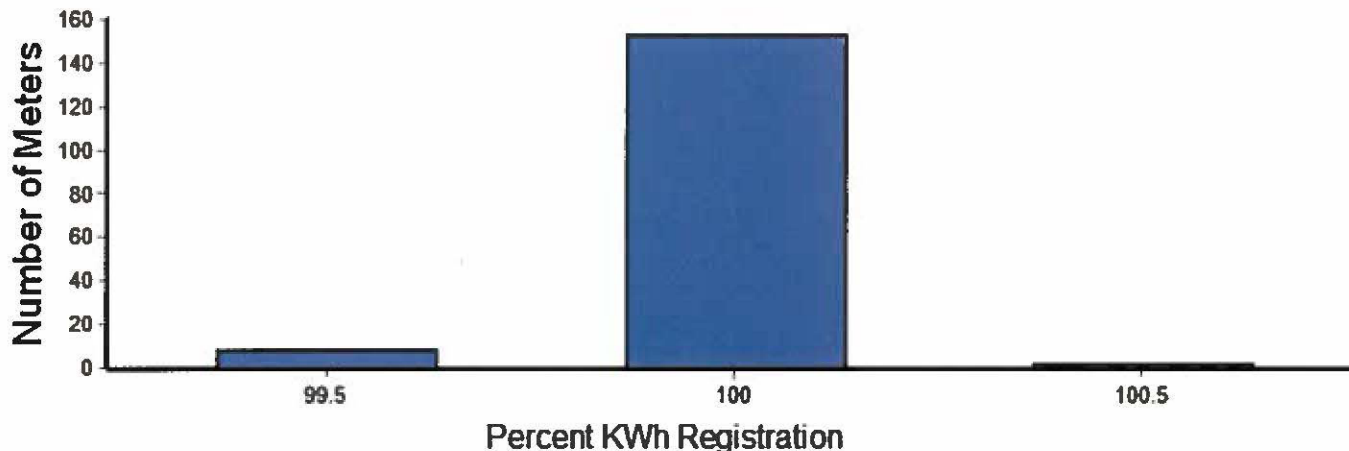
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast wathour meters is less than 2

## Histogram of Group S-024 Meter Accuracies





# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Wathour Meter Group S-025 Summary

### Group Information

Manufacturer: ITRON

Wathour Meter Type(s): CENTRON (C1SR)

PE Type Code(s): S29,S30

Meter Classification: SSS1NI MMR

Methodology: Double Sampling Ph 1

Population: 351551

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.912

Standard Deviation: 0.1257

Number of Test > 102%: 0

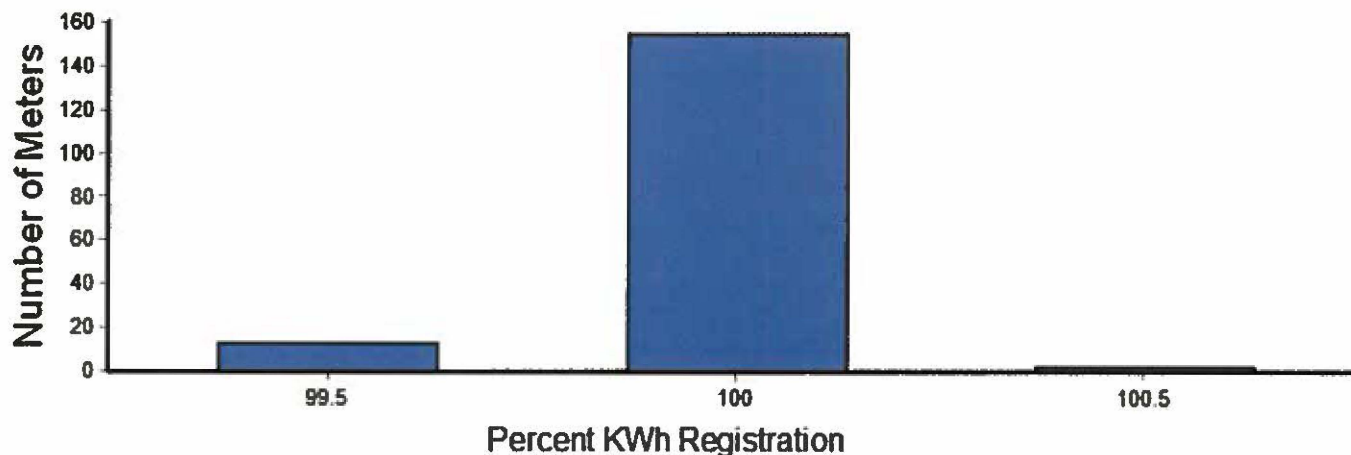
Number of Test 98 - 102%: 172

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast wathour meters is less than 2

## Histogram of Group S-025 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-027 Summary

### Group Information

Manufacturer: ITRON

Watthour Meter Type(s): CENTRON (C1SR)

PE Type Code(s): S31

Meter Classification: SSS1NI

Methodology: Double Sampling Ph 1

Population: 250704

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.968

Standard Deviation: 0.0844

Number of Test > 102%: 0

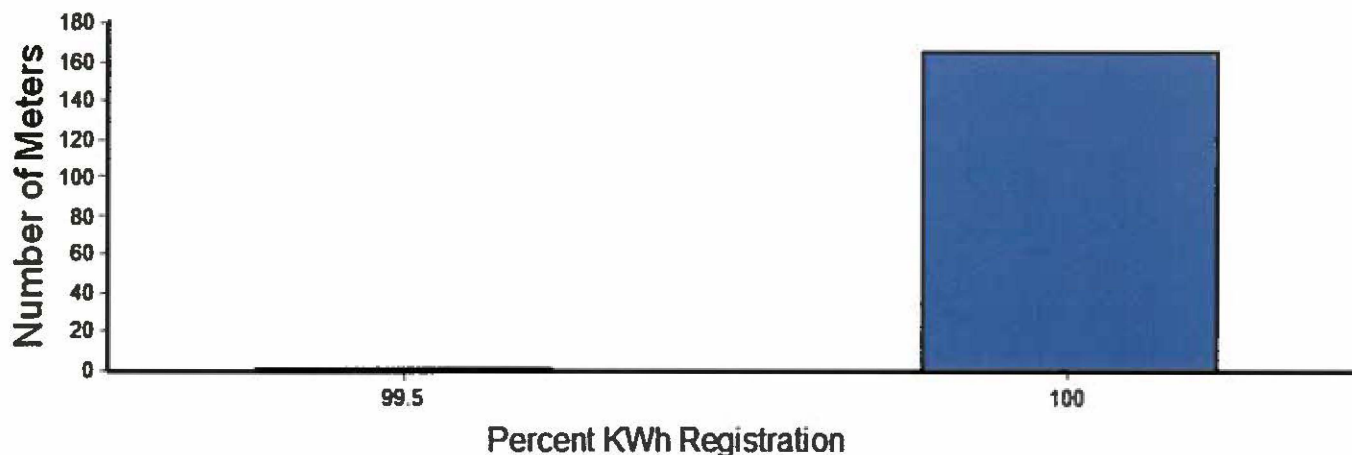
Number of Test 98 - 102%: 167

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-027 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Wathour Meter Group S-030 Summary

### Group Information

Manufacturer: GENERAL ELECTRIC

Wathour Meter Type(s): EV,KV,KV2,I70

PE Type Code(s): E42,E43,E44,E45,E46,E47,E48,E49,E50,E51,E52,E53

Meter Classification: S\*S1NI

Methodology: Double Sampling Ph 1

Population: 313

Sample Size: 186

### Weighted Average Test Summary

Mean: 99.821

Standard Deviation: 0.1787

Number of Test > 102%: 0

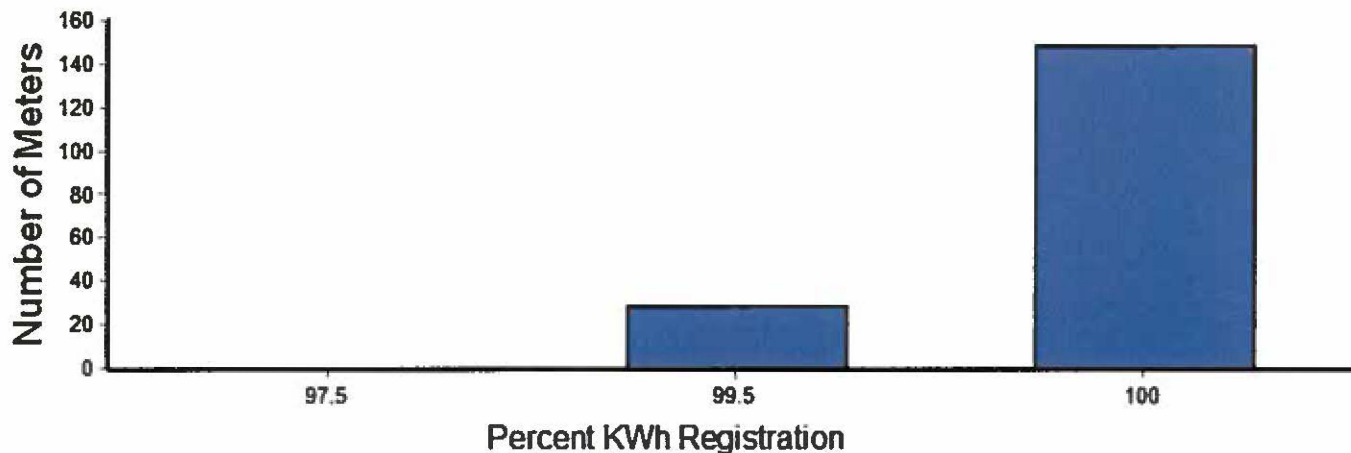
Number of Test 98 - 102%: 177

Number of Test < 98%: 1

### Group Test Summary

This Group PASSES the Sample test since the number of fast wathour meters is less than 2

## Histogram of Group S-030 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-035 Summary

### Group Information

Manufacturer: ELSTER/ABB/WESTINGHOUSE

Watthour Meter Type(s): A1

PE Type Code(s): H21,H22,H23,H24,H25,H30,H31,H32,H33,H34,H35,H36,H37

Meter Classification: S\*S1\*I

Methodology: Double Sampling Ph 1

Population: 1258

Sample Size: 184

### Weighted Average Test Summary

Mean: 99.969

Standard Deviation: 0.1077

Number of Test > 102%: 0

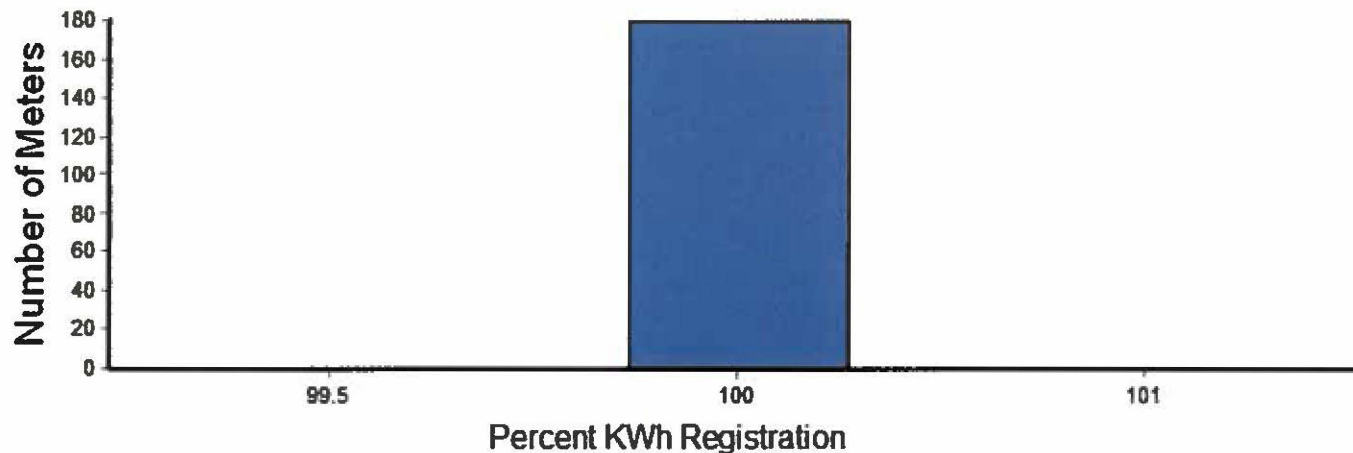
Number of Test 98 - 102%: 181

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-035 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-036 Summary

### Group Information

Manufacturer: GENERAL ELECTRIC

Watthour Meter Type(s): I-210

PE Type Code(s): G42

Meter Classification: SSS1NI

Methodology: Double Sampling Ph 1

Population: 9882

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.952

Standard Deviation: 0.1274

Number of Test > 102%: 0

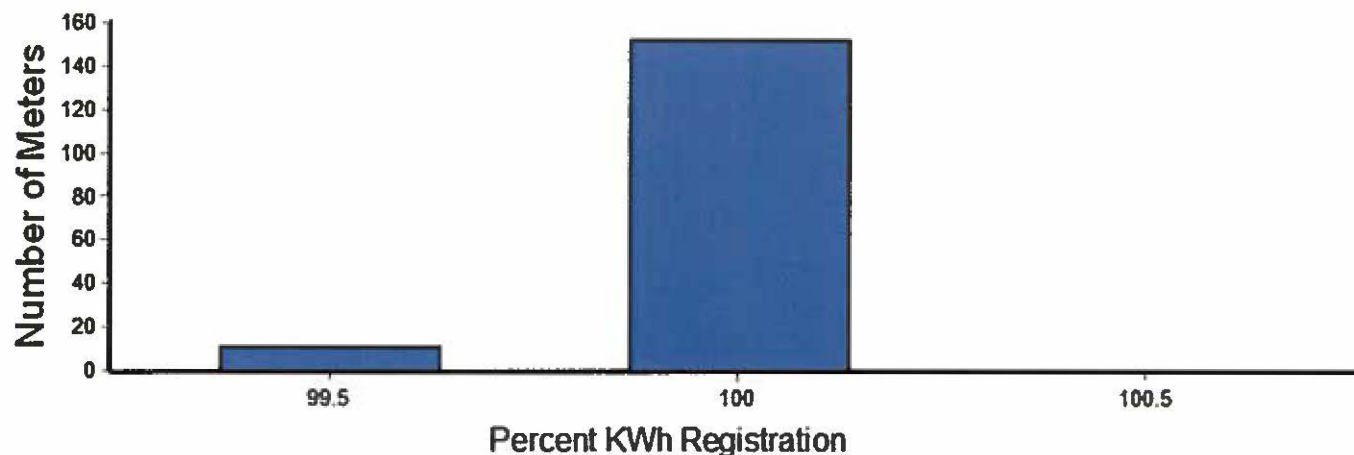
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-036 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-043 Summary

### Group Information

Manufacturer: LANDIS & GYR/DUNCAN

Watthour Meter Type(s): FOCUS AXR

PE Type Code(s): C24

Meter Classification: STS3NI

Methodology: Double Sampling Ph 1

Population: 4643

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.987

Standard Deviation: 0.0463

Number of Test > 102%: 0

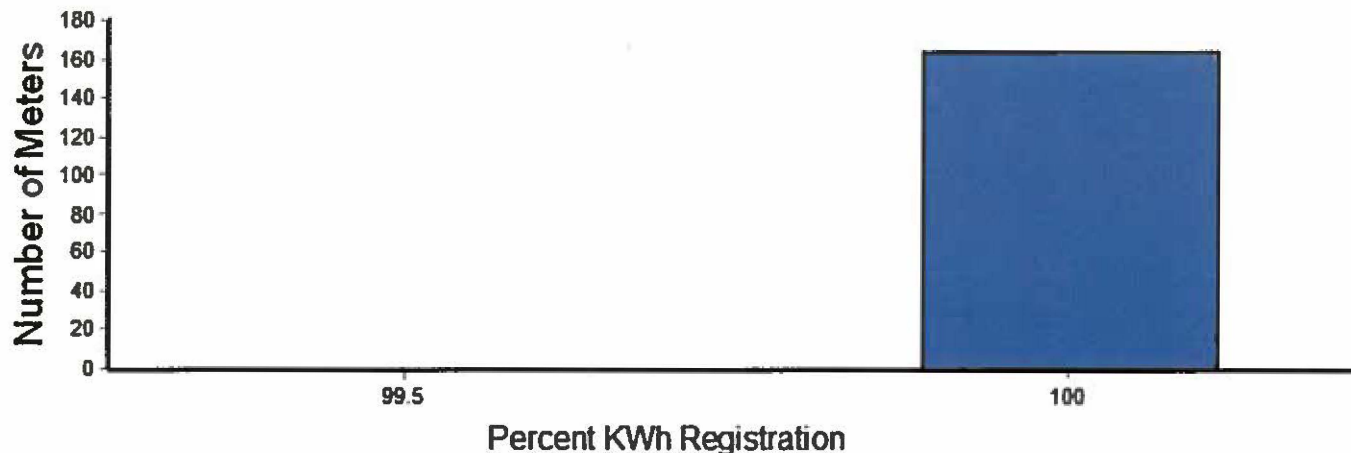
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-043 Meter Accuracies





# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-044 Summary

### Group Information

Manufacturer: LANDIS & GYR/DUNCAN

Watthour Meter Type(s): FOCUS AXR

PE Type Code(s): U19

Meter Classification: STS1NI

Methodology: Double Sampling Ph 1

Population: 23948

Sample Size: 185

### Weighted Average Test Summary

Mean: 99.972

Standard Deviation: 0.048

Number of Test > 102%: 0

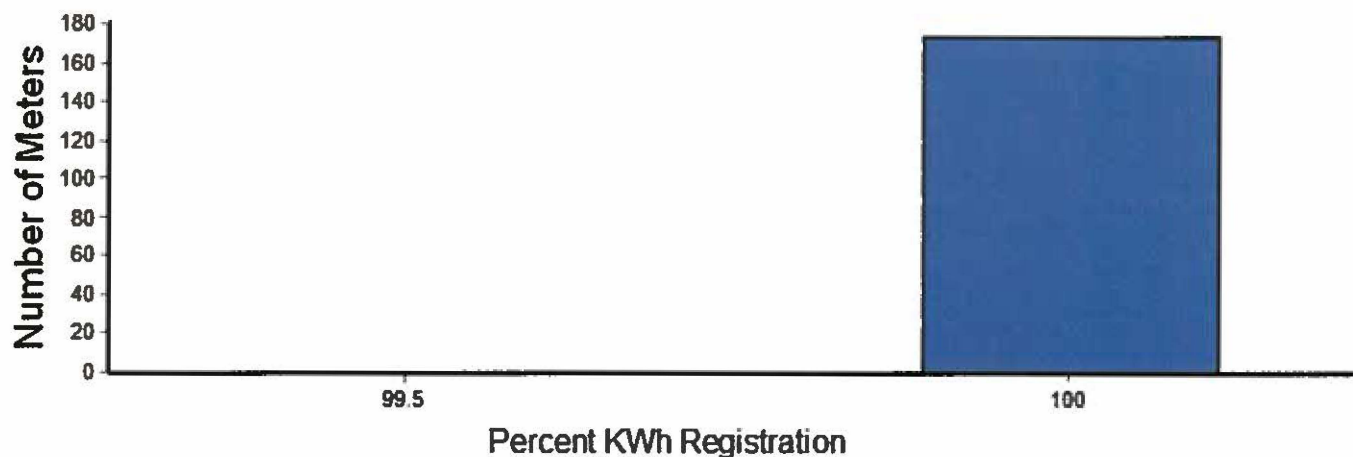
Number of Test 98 - 102%: 174

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-044 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-046 Summary

### Group Information

Manufacturer: ITRON

Watthour Meter Type(s): CENTRON

PE Type Code(s): N16,N18,N19

Meter Classification: SSS\*NI

Methodology: Double Sampling Ph 1

Population: 44231

Sample Size: 186

### Weighted Average Test Summary

Mean: 99.935

Standard Deviation: 0.4463

Number of Test > 102%: 0

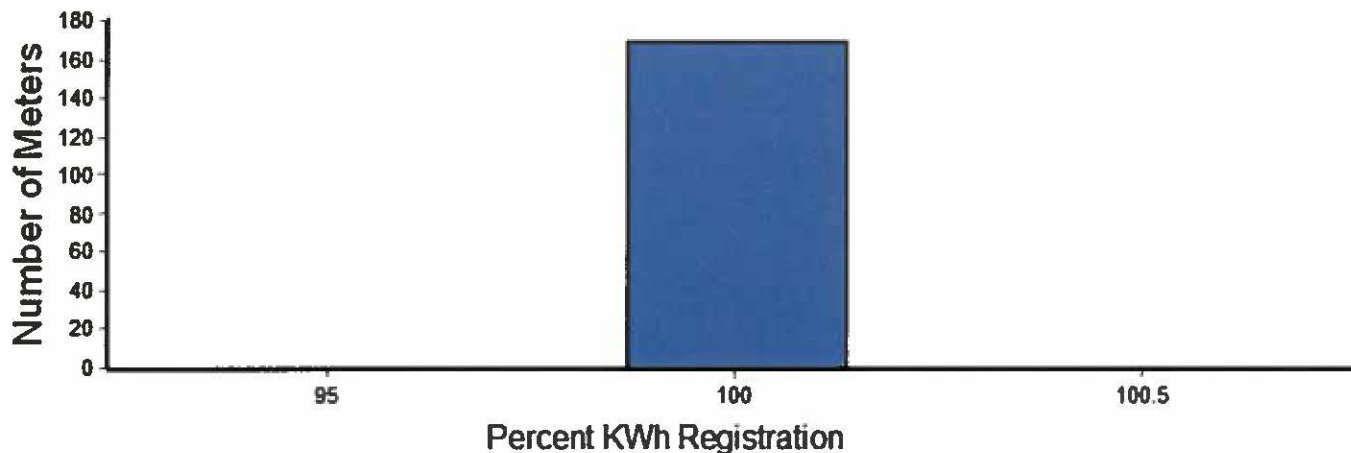
Number of Test 98 - 102%: 170

Number of Test < 98%: 1

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-046 Meter Accuracies





# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-047 Summary

### Group Information

Manufacturer: ITRON

Watthour Meter Type(s): SENTINEL

PE Type Code(s): N17

Meter Classification: SSS3NI

Methodology: Double Sampling Ph 1

Population: 10749

Sample Size: 185

### Weighted Average Test Summary

Mean: 100.026

Standard Deviation: 0.0969

Number of Test > 102%: 0

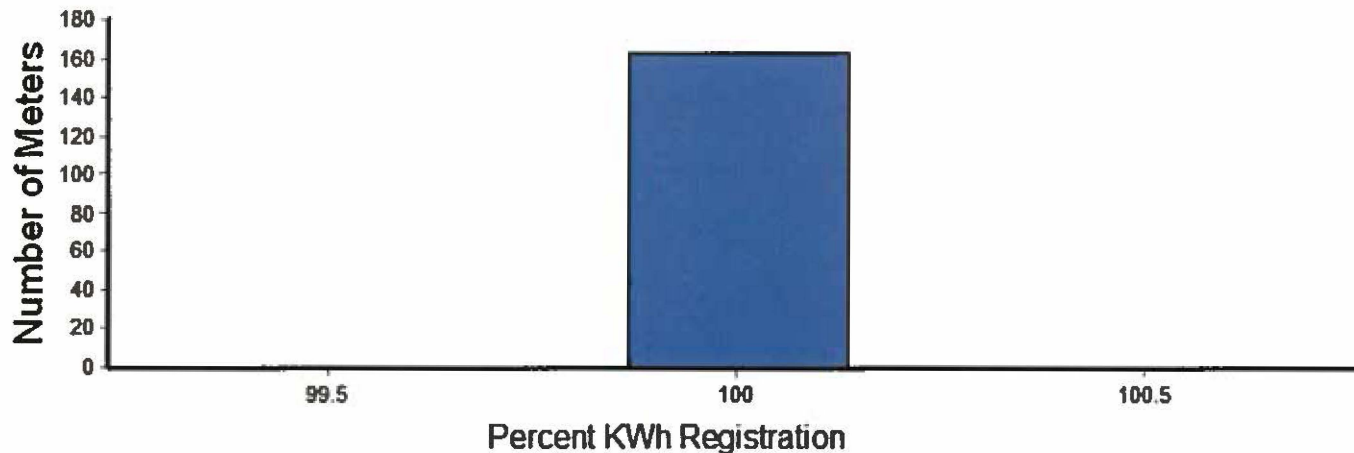
Number of Test 98 - 102%: 165

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-047 Meter Accuracies



# Duke Energy Progress

2018 SELECTIVE SAMPLE

## Watthour Meter Group S-051 Summary

### Group Information

Manufacturer: ELSTER/ABB/WESTINGHOUSE

Watthour Meter Type(s): A3

PE Type Code(s): Y72,Y73,Y74,Y75,Y76,Y77,Y78,Y79,Y80,Y81,Y82,Y83,Y84,Y85,Y86,Y87,Y88,Y89

Meter Classification: S\*S\*\*I

Methodology: Double Sampling Ph 1

Population: 1046

Sample Size: 186

### Weighted Average Test Summary

Mean: 99.967

Standard Deviation: 0.0459

Number of Test > 102%: 0

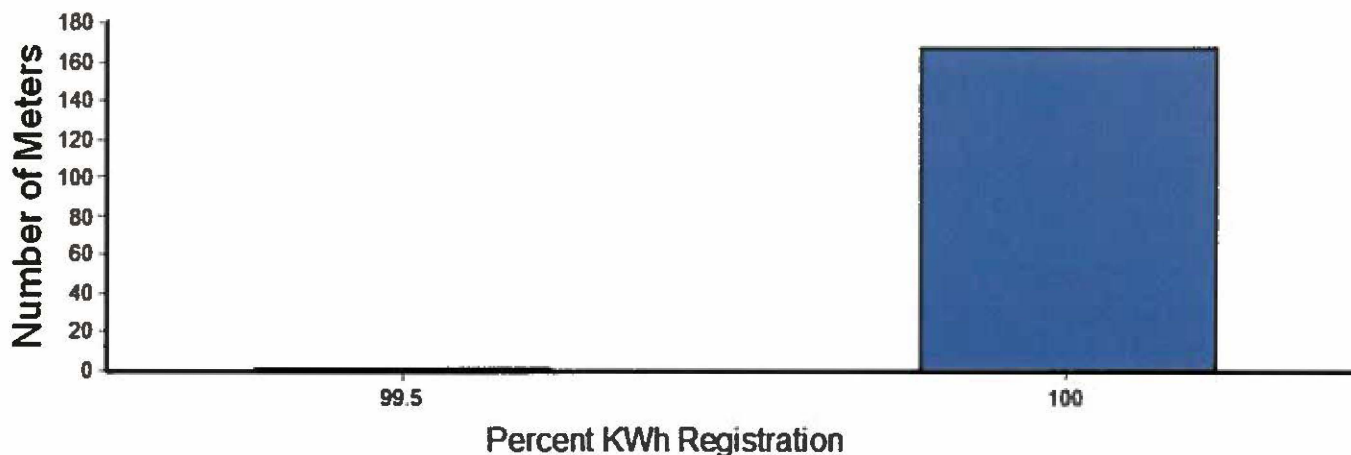
Number of Test 98 - 102%: 169

Number of Test < 98%: 0

### Group Test Summary

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

## Histogram of Group S-051 Meter Accuracies



**Duke Energy Progress**

2018 SELECTIVE SAMPLE

**Watthour Meter Group S-065 Summary****Group Information**

Manufacturer: ELSTER/ABB/WESTINGHOUSE

Watthour Meter Type(s): A3

PE Type Code(s): H42,H45,H46,H47,H48,H49,H50,H51,H54,H55,H56,H57,H58,H59,H60,H61

Meter Classification: STS1\*I

Methodology: Double Sampling Ph 1

Population: 2500

Sample Size: 184

**Weighted Average Test Summary**

Mean: 100

Standard Deviation: 0.032

Number of Test &gt; 102%: 0

Number of Test 98 - 102%: 180

Number of Test &lt; 98%: 0

**Group Test Summary**

This Group PASSES the Sample test since the number of fast watthour meters is less than 2

**Histogram of Group S-065 Meter Accuracies**